

Childhood Obesity: Issues, Data and Draft Legislation

Connecticut Commission on Children

Childhood Obesity in Connecticut: Where We Stand

A Health Epidemic

- The prevalence of overweight American children nearly doubled in the past 20 years and nearly tripled for adolescents.
- Nationally, over 50% of all obese six-year olds are projected to become obese adults. Connecticut's obesity rate has risen from 11.7% in 1990 to 19.1% in 2004.
- Overweight children face increased risks of Type 2 diabetes, hypertension, and heart disease.
- Approximately 9% of Connecticut students in grades 9 to 12 are overweight.
- In some Connecticut communities, as many as 25% of children are overweight.
- More than 3,000 people in Connecticut die each year from obesity and its complications.
- In Connecticut, obesity-related health problems cost \$856 million in 2003.

Key Policy Issues on Childhood Obesity

- 1) **Nutrition standards**: Healthy nutrition environments in schools from cafeteria lines to concessions to sports games. Strengthen state standards to ensure that schools support and encourage healthful eating.
- 2) **Vending machine usage**: Restrictions on the types of foods and drinks sold in schools, and on access to vending machines. Five towns are participating in a pilot project to replace "junk food" in vending machines with nutritious food. This is a project of Connecticut Team Nutrition, a joint initiative that includes the University of Connecticut, the Yale Center for Easting and Weight Disorders, the Department of Public Health and the State Department of Education.
- 3) **Body mass index** (BMI) measured by a child's physician, reported confidentially on a child's health record and used anonymously to measure obesity trends by school and school districts. The Early Childhood Health Assessment Form (released in August 2004) list BMI as an item for the child's physician to complete, but few schools use the information to map student health trends.
- 4) **Recess and physical education**: Additional time for recess, physical activity and physical education, including a wider range of activities for boys and girls that are enjoyable and non-competitive in order to appeal to a majority of students. Connecticut law requires each student to have daily physical activity, but the law does not specify the amount of time or nature of that activity. *Sports Illustrated* magazine recently featured an innovative physical education program in the Parker Memorial middle school in Tolland, Connecticut, developed with the University of Connecticut's Neag School of Education.
- 5) **Obesity programs and education**: Obesity prevention as part of school curricula and tools to help educators make changes in their own classroom environments.
- 6) **Municipal planning for active lifestyles**: Comprehensive wellness initiatives that encourage active lifestyles through health, transportation and land use policies and public education and outreach. East Hartford and Ledyard have established community plans to combat obesity and promote health.

- 7) **Health insurance:** Coverage for the treatment of obesity. Quality improvement and coordination among managed care organizations, health plans, public health systems and disease management programs to reduce childhood and adult obesity.
- 8) **Youth leadership**: Young people to lead efforts to address the obesity crisis, and a statewide student advisory committee to promote youth leadership in order to reverse child obesity trends.
- 9) **Statewide infrastructure**: A strong statewide partnership to address and coordinate the response to the childhood obesity epidemic through the identification and dissemination of best practices to schools and communities.



Childhood Obesity in Connecticut

A National Epidemic

Obesity is a public health epidemic, according to the federal Centers for Disease Control and Prevention. The prevalence of overweight American children nearly doubled in the past 20 years and nearly tripled for adolescents.ⁱⁱ Nationally, over 50% of all obese six-year olds are projected to become obese adults.ⁱⁱⁱ

Connecticut trends

Connecticut's obesity rate has risen steadily over the past several years from 11.7% in 1990 to 19.1% in 2004. iv Over half (54.8%) of Connecticut's adults are either obese (19.1%) or overweight (35.7%). The estimated medical expenditures attributable to obesity in Connecticut adults for 2003 are \$856 million. vi

Although obesity data are unavailable on Connecticut's children as a whole, nearly one in ten (9.1%) Connecticut high school students were overweight in 1999. A 2000 study of Hartford student records found that 13% of kindergarteners and 24% of sixth graders were overweight. Roughly one-fifth to one-quarter (between 19% and 24%) of Bridgeport and Hartford children in grades K, 6 & 11 are overweight, according to recent studies.

Physical exercise

A 2003 national study found that America's young children may not be getting enough vigorous physical exercise through their schools' physical education programs. The third-grade children in the study received an average of 25 minutes per week in school of moderate to vigorous activity. Experts have recommended that young people should participate in physical activity of at least moderate intensity for 30 to 60 minutes each day.^x The average Connecticut elementary student gets less than 40 hours a year of physical education instruction.^{xi}

Medical outcomes

Obesity in children has been linked to increased risk for type 2 diabetes; sleep apnea; high blood pressure and high cholesterol; asthma; and psychological problems, including depression. Diabetes appears to be increasing among Connecticut children. Hospital discharges for children where diabetes was the primary diagnosis grew 15% between 1991 and 1996. Xiii

Obesity linked to hunger and food insecurity

Low-income households are much more likely than others to suffer from hunger and food insecurity because they have fewer resources to buy food. In greater Hartford, 100,000 people receive food from food pantries, soup kitchens and shelters, and 40,000 of them are children.

Poor parents often have limited options. Fast food chains are concentrated in low-income urban neighborhoods, and their low-cost "extra value" fare contains a high percentage of saturated fat. Parents turn to other techniques to stretch available food – including preparing low-cost dishes, amending rotten food, and diluting dishes and drinks. These options place their family's health at risk.^{xvi}

Nearly one in four families with incomes below 100% of the federal poverty level reported some inability to meet their family's food needs in the past year. Examples of the ways in which poor families deal with this include parents skipping means so that children can eat or relying on powdered rather than fresh milk. Once a family earns between 100% and 200% of FPL, the percentage having difficulty meeting food needs drops from 23% (among families 0% to 100% of FPL) to 10%. While most children in the U.S. rarely go without meals, children in low-income families frequently do not get the nutrition they need to be healthy. **xvii**

Children living in low-income families are more likely than other children to be seriously overweight, although children of all income backgrounds are at great risk for obesity. A recent study found that 9% of children from families at or above 300% were overweight, compared with 12% of low-income children (200% of FPL and below). Volume obesity is a risk factor for a range of serious health problems, and it is also associated with lost work productivity, increased health care costs, and premature death and disability. Vix

When families are food insecure, the lack of adequate resources for food can result in weight gain due to the need to maximize caloric intake (low-income families may consume lower-cost foods with higher levels of calories per dollar to stave off hunger), a trade-off between food quantity and quality (food-insecure households reduce the quality or variety of food consumed before they reduce the quantity of food eaten), overeating when food is available, and physiological changes that help the body conserve energy when diets are periodically inadequate. With fewer resources to buy food, low-income families are particularly susceptible to damage from food insecurity, hunger and obesity.^{xx}

Health Consequences

Obesity has costly direct and indirect consequences for families, health systems and the government programs that pay for emergency and long-term illness care. Obesity is a risk factor for heart disease, diabetes, several types of cancer, and other chronic health problems. It also is associated with premature death and disability, increased health care costs and lost productivity. Adult obesity outranks both smoking and problem drinking in its detrimental effects on health and medical costs, according to a 2002 study by a Rand Corporation economist. **xii

In 2000, the estimated cost of obesity nationally was \$117 billion (\$61 billion in direct costs; \$56 billion in indirect costs mostly due to heart disease, diabetes and hypertension). There are an estimated 300,000 deaths attributable to obesity each year. *xxiii*

Strategic Considerations on Obesity

- It is essential to work at the **prevention** stage with younger children. Obesity stubbornly resists treatment efforts.
- Surveys show that many parents of overweight children do not appreciate the health risks associated with obesity. Programs must include consciousness raising and education of parents.
- **Information is lacking about what works** to prevent or reduce childhood obesity. There is little evidence from long-term scientific studies, and very little literature about best practices. (With the exception of breast-feeding, which appears to be very effective in reducing obesity.)
- Media and advertising significantly contribute to a child's unhealthy life style. The Kaiser Family Foundation reports that "the recent surge in childhood obesity has been mirrored by an explosion in media targeted to children: shows and videos, specialized cable networks, video games, computer activities and Internet Web sites."

Connecticut Law

P.A. 04-224, An Act Concerning Childhood Nutrition in Schools, Recess and Lunch Breaks, signed into law in 2004, requires each public school full-day student to have (1) 20 minutes for lunch, (2) a daily physical exercise period in grades K-5 (except for special education plans that include a different schedule), and (3) nutritious, low-fat foods and drinks, and fresh or dried fruit, available for purchase.

State Managed Care Council recommendations (Sept. 2004)

The State Medicaid Managed Care Council voted in September 2004 to recommend creating a comprehensive system to collect data, identify and implement best practices and continuously monitor progress in preventing and reducing childhood obesity. A state steering committee would be charged with overseeing the system comprised of leaders representing the various organizations and systems that impact obesity, schools, health care organizations, providers, managed care organizations, academic research centers, major worksites, key community

organizations, local businesses, and policy making agencies. It would guide the development and implementation of a comprehensive state plan to prevent obesity in children and adults. The structure would be charged with:

- providing the necessary collaborative structure to identify the diverse resources that exit or are needed to address this health crisis in Connecticut
- serving as a single resource of all information regarding obesity prevalence, obesity-related health risk, prevention and treatment interventions as well as all proposed and enacted legislation and mandates needed by government and non-government bodies to conduct new or ongoing obesity programs.

Legislative Checklist

The University of Baltimore, which assesses each state's legislative performance to combat obesity, uses the following criteria or checklist of necessary obesity control measures that should be taken at the state level.

- 1) **Nutrition standards**: controlling types of food and drinks offered during school.
- 2) **Vending machine usage**: prohibiting types of foods and drinks sold in school and prohibiting access to vending machines at certain times.
- 3) **Body mass index** (BMI) measured in school and sent to parents.
- 4) **Recess and physical education**: State mandated additional recess and phys ed. time.
- 5) **Obesity programs and education**: programs established as part of the curriculum.
- 6) **Obesity Research**: other institutions or groups directed by legislature to study obesity.





Examples of Other States' Actions

• Arkansas banned elementary school students' access to vending machine.

- Arkansas created a Child Health Advisory Committee to develop nutrition and physical activity standards and make recs. on a la carte/vending machine/bake sale-fundraiser food sales in schools.
- California banned school boards from granting "pouring rights" contracts that give a beverage company exclusive rights to market its products in schools and during school events in return for a percent of the proceeds based on the amount of soda kids drink without a public hearing.
- California replaced all soda in school vending machines with milk, water and juice. It also limited access to vending machines during the school day.
- California legislators proposed a two-cent per soda can tax, the revenue to be split among schools that voluntarily banned junk food sales, school fitness programs, and obesity prevention and dental care programs.
- Colorado encouraged each school board to adopt policy that at least half of vending machine items meet acceptable nutritional standards and consist of specified foods.
- Florida took a global approach by implementing physical activity and nutrition awareness, TA to schools, health depts., providers and community groups.
- Florida encouraged schools to have students spend at least 60 minutes a day in physical activity.
- Louisiana mandated 30 minutes a day of moderate/vigorous physical exercise for elementary school students.
- Louisiana established 3-year pilot to assess students' physical fitness and weight changes.
- Tennessee required its State Board of Education to establish minimum nutrition standards and portion sizes for individual food items offered for sale to pre-K 8th grade students through vending machines and school lunch programs.
- Vermont established an advisory council to plan and encourage development of comprehensive wellness programs in public schools and communities. It required the education commissioner to develop a model school wellness policy and to collect BMI data.
- Washington required development of a model school policy concerning access to nutrition foods and opportunity for exercise.



Draft legislative language:

(Researched and Prepared in 2004 for the 2005 Legislative Session)

An Act Concerning Childhood Obesity and Health Promotion

Whereas

- Connecticut's obesity rate has risen from 11.7% in 1990 to 19.1% in 2004.
- Overweight children face increased risks of Type 2 diabetes, hypertension, and heart disease.
- Approximately 9% of Connecticut students in grades 9 to 12 are overweight.
- In some Connecticut communities as many as 24% of children are overweight.
- More than 3,000 people in Connecticut die each year from obesity and its complications.
- Obesity-related health problems annually cost Connecticut \$856 million.
- Much can be done to prevent costly obesity-related health problems.

Statement of Purpose: This bill seeks to reverse child obesity trends by increasing exercise, improving nutritional intake, informing the public, addressing school food issues, creating a state nutrition policy, encouraging municipalities to lead on active lifestyle opportunities, gathering data on obesity trends, including body mass index information, and creating a structure to coordinate child obesity efforts, and through other prevention strategies.

Section 1. Section 10-2210 is repealed and the following is substituted in lieu thereof:

Each local and regional board of education shall require each school under its jurisdiction to (1) offer all full day students a daily lunch period of not less than twenty minutes, and (2) include in the regular school day for each student enrolled in grades kindergarten to five, inclusive, a period of moderate to vigorous physical exercise for a minimum of twenty minutes every school day or a minimum of one hundred minutes every week, except that a planning and placement team may develop a different schedule for a child requiring special education and related services in accordance with chapter 164 and the Individuals With Disabilities Education Act, 20 USC 1400 et seq., as amended from time to time. In the event of a conflict with this section and any provision of chapter 164 such other provision of chapter 164 shall be deemed controlling.

Section 2. (NEW) (*Effective July 1, 2005*) (a) By January 1, 2006, the Commissioners of Insurance and Public Health shall make available to the public information that identifies the availability of obesity interventions by commercial insurance carriers licensed in the state. The commissioners shall regularly update this information and make it available on their department websites and through other means.

(b) By July 1, 2006, the Commissioners of Insurance and Public Health shall recommend whether health insurance coverage for the treatment of obesity shall be mandated in the state to the co-chairs of the committee of cognizance of the General Assembly on issues related to public health.

Sec. 3. Subsection (a) of section 10-266w of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2004*):

(a) For each fiscal year, each local and regional board of education having at least one school building designated as a severe need school, as defined by federal law governing school nutrition programs, in the fiscal year two years prior to the grant year, shall be eligible to receive a grant to assist in providing school breakfasts to all students in each eligible severe need school, provided any local or regional board having at least one school building so designated shall participate in the federal school breakfast program on behalf of all severe need schools in the district with grades eight or under in which at least [eighty] forty per cent of the lunches served

are served to students who are eligible for free or reduced price lunches pursuant to federal law and regulations.

Section 4. (NEW). (Effective July 1, 2005) The Department of Education, based on the results of its TEAM Nutrition Pilot and Vending Pilot Programs, shall publish a recommended list of foods that may be offered for sale or consumption to pupils at Connecticut elementary, middle and secondary schools by August 1, 2005. Local and regional boards of education may follow such recommendations during the 2005-2006 school year and shall follow such recommendations beginning in the 2006-2007 school year.

Section 5. Section 10-221p is repealed and the following is substituted in lieu thereof: Each local and regional board of education shall make available in the schools under its jurisdiction for purchase by students enrolled in such schools (1) no drinks except nutritious, low-fat [foods and] drinks, which shall include, but shall not be limited to, low-fat milk, one hundred per cent natural fruit juices and water [at all times when drink is available for purchase by students in such schools] [and] (2) low-fat dairy products and fresh or dried fruit at all times when food is available for purchase by students in such schools during the regular school day, and (3) in vending machines, school canteens, and stores, only drinks and foods specified in (1) and (2).

Section 6. (NEW) (*Effective July 1, 2005*) (a) It shall be the goal of the state to systematically reduce preventable illness caused by childhood obesity.

- (b) There shall be a State Obesity Prevention Initiative, to meet the goal in subsection (a), which shall:
- (1) identify the diverse resources that exist or are needed to address the health crisis of obesity in Connecticut;
- (2) develop and adopt a method of documenting, recording and reviewing anonymous group data on childhood obesity in the HUSKY program and statewide, including but not limited to Body Mass Index data;
- (3) develop a state nutrition policy;
- (4) develop a public education and outreach campaign to families and other consumers on issues related to childhood obesity;
- (5) work with municipalities, schools, businesses, philanthropic organizations and others to develop and support policies and initiatives that reduce childhood obesity;
- (6) coordinate continuous review of evidence-based literature by (i) identifying existing surveillance data on obesity prevalence and co-morbidities, and (ii) summarizing and updating evidence-based best practices for the prevention and treatment of childhood obesity;
- (7) test a series of promising but unproven interventions to reduce childhood obesity, identified through literature review and a call for proposals from academic and other non-profit organizations, and review the effectiveness of pilot projects tested in the state to reduce child obesity;

- (8) in consultation with the Department of Transportation, develop state guidance for municipalities to encourage local planning and zoning plans that support active lifestyles and encourage safe pedestrian and bicycle routes, recreation, and exercise;
- (9) in consultation with the Departments of Education and Higher Education and the Connecticut Dietetic Association, develop a CEU program to bolster nutrition and health education in schools; and
- (10) encourage state agencies to consider plans for physical activity when awarding grants to finance public facilities.
- (c) A Steering Committee shall carry out the Initiative in subsection (b), oversee and coordinate childhood and adult obesity prevention policies and initiatives in the state, provide state leadership and collaborate with local, regional and state experts and organizations to meet the goal in subsection (a), seek federal and private funding to support community and statewide initiatives under this section, and serve as a central resource for information regarding obesity.
- (d) The Steering Committee shall be composed of the commissioners of Agriculture, Children and Families, Economic and Community Development, Education, Insurance, Public Health, Social Services, and Transportation, the Secretary of the Office of Policy and Management, the co-chairs of the Medicaid Managed Care Council and the Food Security Council, the executive directors of the African American Affairs Commission, the Commission on Children, the Latino and Puerto Rican Affairs Commission, or their designees; a pediatrician and a representative from a non-profit organization concerned with childhood hunger and obesity, appointed by the House majority leader; a representative of a municipal health department and a representative of a university-based program concerned with obesity prevention, appointed by the House minority leader; a health teacher and a physical education teacher who work in the public schools, appointed by the Senate majority leader; and a nurse who work in a public school, appointed by the Senate minority leader; and a school superintendent, a school principal, the executive director of a state organization representing boards of education, five elected municipal chief officials, a representative of a parks and recreation department, three youths under the age of 18 at the time of appointment, and five representatives of community initiatives on childhood health or nutrition, appointed biennially by the Governor. The Governor shall biennially appoint one of the Steering Committee members to be Chair.
- (e) In consultation with the Steering Committee, the Commission on Children shall convene a student advisory committee to promote youth leadership in order to reverse child obesity trends within communities and schools.
- (f) The Departments of Education and Public Health shall provide administrative support to the Steering Committee.
- (g) The Steering Committee shall meet quarterly and shall, by January 1, 2006 and annually thereafter, submit a report on (1) the state's activities pursuant to subsections (b) and (c), (2) the state's progress in meeting the goal in subsection (a), and (3) the committee's recommendations for further state action in support of this goal, to the Governor, the Senate President Pro Tempore, the Speaker of the House, and the co-chairs of the committees of cognizance of the General Assembly on issues related to children, education, human services and public health.

Sec. 7. Section 10-206 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2004*):

- (a) Each local or regional board of education shall require each pupil enrolled in the public schools to have health assessments pursuant to the provisions of this section. Such assessments shall be conducted by a legally qualified practitioner of medicine, an advanced practice registered nurse or registered nurse, licensed pursuant to chapter 378, a physician assistant, licensed pursuant to chapter 370, or by the school medical advisor to ascertain whether such pupil is suffering from any physical disability tending to prevent such pupil from receiving the full benefit of school work and to ascertain whether such school work should be modified in order to prevent injury to the pupil or to secure for the pupil a suitable program of education. No health assessment shall be made of any child enrolled in the public schools unless such examination is made in the presence of the parent or guardian or in the presence of another school employee. The parent or guardian of such child shall receive prior written notice and shall have a reasonable opportunity to be present at such assessment or to provide for such assessment himself or herself. A local or regional board of education may deny continued attendance in public school to any child who fails to obtain the health assessments required under this section.
- (b) Each local or regional board of education shall require each child to have a health assessment prior to public school enrollment. The assessment shall include: (1) A physical examination which shall include hematocrit or hemoglobin tests, height, weight, blood pressure, body mass index-for-age and [, beginning with the 2003-2004 school year,] a chronic disease assessment which shall include, but not be limited to, asthma, as defined by the Commissioner of Public Health pursuant to subsection (c) of section 19a-62a and all types of diabetes when the body mass index-for-age percentile is above a level determined by the Commissioner of Public Health and included on the assessment form. The assessment form shall include (A) a check box for the provider conducting the assessment, as provided in subsection (a) of this section, to indicate an asthma or diabetes diagnosis, (B) screening questions relating to appropriate public health concerns to be answered by the parent or guardian, and (C) screening questions to be answered by such provider; (2) an updating of immunizations as required under section 10-204a, provided a registered nurse may only update said immunizations pursuant to a written order by a physician or physician assistant, licensed pursuant to chapter 370, or an advanced practice registered nurse, licensed pursuant to chapter 378; (3) vision, hearing, speech and gross dental screenings; and (4) such other information, including health and developmental history, as the physician feels is necessary and appropriate. The assessment shall also include tests for tuberculosis, sickle cell anemia or Cooley's anemia and tests for lead levels in the blood where the local or regional board of education determines after consultation with the school medical advisor and the local health department, or in the case of a regional board of education, each local health department, that such tests are necessary, provided a registered nurse may only perform said tests pursuant to the written order of a physician or physician assistant, licensed pursuant to chapter 370, or an advanced practice registered nurse, licensed pursuant to chapter 378.
- (c) Each local or regional board of education shall require each pupil enrolled in the public schools to have health assessments in either grade six or grade seven and in either grade ten or grade eleven. The assessment shall include: (1) A physical examination which shall include hematocrit or hemoglobin tests, height, weight, blood pressure, body mass index-for-age and [, beginning with the 2003-2004 school year,] a chronic disease assessment which shall include, but not be limited to, asthma, as defined by the Commissioner of Public Health pursuant to subsection (c) of section 19a-62a and all types of diabetes when the body mass index-for-age percentile is above a level determined by the Commissioner of Public Health and included on the

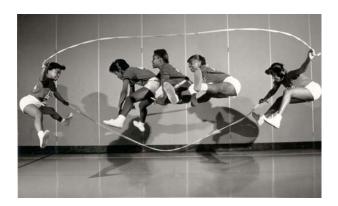
assessment form. The assessment form shall include (A) a check box for the provider conducting the assessment, as provided in subsection (a) of this section, to indicate an asthma or diabetes diagnosis, (B) screening questions relating to appropriate public health concerns to be answered by the parent or guardian, and (C) screening questions to be answered by such provider; (2) an updating of immunizations as required under section 10-204a, provided a registered nurse may only update said immunizations pursuant to a written order of a physician or physician assistant, licensed pursuant to chapter 370, or an advanced practice registered nurse, licensed pursuant to chapter 378; (3) vision, hearing, postural and gross dental screenings; and (4) such other information including a health history as the physician feels is necessary and appropriate. The assessment shall also include tests for tuberculosis and sickle cell anemia or Cooley's anemia where the local or regional board of education, in consultation with the school medical advisor and the local health department, or in the case of a regional board of education, each local health department, determines that said screening or test is necessary, provided a registered nurse may only perform said tests pursuant to the written order of a physician or physician assistant, licensed pursuant to chapter 370, or an advanced practice registered nurse, licensed pursuant to chapter 378.

- (d) The results of each assessment done pursuant to this section and the results of screenings done pursuant to section 10-214 shall be recorded on forms supplied by the State Board of Education. Such information shall be included in the cumulative health record of each pupil and shall be kept on file in the school such pupil attends. If a pupil permanently leaves the jurisdiction of the board of education, the pupil's original cumulative health record shall be sent to the chief administrative officer of the school district to which such student moves. The board of education transmitting such health record shall retain a true copy. Each physician, advanced practice registered nurse, registered nurse, or physician assistant performing health assessments and screenings pursuant to this section and section 10-214 shall completely fill out and sign each form and any recommendations concerning the pupil shall be in writing. The results of each assessment shall not be used for any purpose except those purposes described in this section.
- (e) Appropriate school health personnel shall review the results of each assessment and screening as recorded pursuant to subsection (d) of this section. When, in the judgment of such health personnel, a pupil, as defined in section 10-206a, is in need of further testing or treatment, the superintendent of schools shall give written notice to the parent or guardian of such pupil and shall make reasonable efforts to assure that such further testing or treatment is provided. Such reasonable efforts shall include a determination of whether or not the parent or guardian has obtained the necessary testing or treatment for the pupil, and, if not, advising the parent or guardian on how such testing or treatment may be obtained. The results of such further testing or treatment shall be recorded pursuant to subsection (d) of this section, and shall be reviewed by school health personnel pursuant to this subsection. In no instance shall an individual child's weight or body mass index be revealed publicly. Any utilization of aggregate weight and body mass index data shall protect the privacy of children and their families, and shall be strictly used to assess norms and trends and to lower child obesity.
- (f) On and after February 1, 2004, each local or regional board of education shall report, on an annual basis, the total number of pupils per school and per school district having a diagnosis of asthma recorded on such health assessment forms to the local health department and the Department of Public Health. The report shall contain the asthma information collected as required under subsections (b) and (c) of this section and shall include pupil age, gender, race, ethnicity and school. Beginning on October 1, 2004, and every three years thereafter, the Department of Public Health shall review the asthma screening information reported pursuant to

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this section and shall submit a report to the joint standing committees of the General Assembly having cognizance of matters relating to public health and education concerning asthma trends and distributions among pupils enrolled in the public schools. The report shall be submitted in accordance with the provisions of section 11-4a and shall include, but not be limited to, trends and findings based on pupil age, gender, race, ethnicity, school and the education reference group, as determined by the Department of Education for the town or regional school district in which such school is located.

(g) On and after February 1, 2006, each local or regional board of education shall report, on an annual basis, the total number of pupils per school and per school district having a diagnosis of obesity based on the body mass index-for-age recorded on such health assessment forms to the local health department and the Department of Public Health. The report shall contain the body mass index-for-age information collected as required under subsections (b) and (c) of this section and shall include pupil age, gender, race, ethnicity and school. Beginning on October 1, 2006, and every three years thereafter, the Department of Public Health shall review the obesity information reported pursuant to this section and shall submit a report to the joint standing committees of the General Assembly having cognizance of matters relating to public health and education concerning obesity trends and distributions among pupils enrolled in the public schools. The report shall be submitted in accordance with the provisions of section 11-4a and shall include, but not be limited to, trends and findings based on pupil age, gender, race, ethnicity, school and the education reference group, as determined by the Department of Education for the town or regional school district in which such school is located. Such report shall not reveal the names of individual pupils.





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- vii Spigel, S. (2002, June 19). *Childhood obesity*. Report # 2002-R-0529. Hartford, CT: Office of Legislative Research, Connecticut General Assembly.
- viii Connecticut General Assembly, Office of Legislative Research. (2002, July). *Childhood obesity*. Report # 2002-R-0858. Hartford, CT: Author.
- ix Connecticut Department of Public Health. (2004, Dec.). Draft version of *Connecticut's plan for health promotion through healthy eating and active living*, 5. Hartford: Author.
- ^xNational Institute of Child Health and Human Development (NICHD), Study of Early Child Care and Youth Development, *Archives of Pediatrics and Adolescent Medicine (February 2003)*, described at http://www.nichd.nih.gov/new/releases/exercise.cfm>.
- xi Spigel, S. (2002, June 19). *Childhood obesity*. Report # 2002-R-0529. Office of Legal Research, Connecticut General Assembly.
- xii Spigel, S. (2002, June 19). *Childhood obesity*. Report # 2002-R-0529. Office of Legal Research, Connecticut General Assembly.
- xiii Connecticut General Assembly, Office of Legislative Research. (2002, July). *Childhood obesity*. Report # 2002-R-0858. Hartford, CT: Author.
- xiv Center on Hunger and Poverty & Food Research and Action Center. (Undated). *The paradox of hunger and obesity in America*.
- xv End Hunger Connecticut! (2003). *Making room at the table*, 5. Hartford: Author.
- xvi Children's Defense Fund. (2004, Jun. 2). 13 million children face food insecurity. Washington, D.C.: Author.
- ^{xvii} Gershoff, E. (2003, Sept.) *Low income and hardship among America's kindergartners*. New York, NY: National Center for Children in Poverty.
- xviii Gershoff, E. (2003, Nov.). *Low income and the development of America's kindergartners*, pp. 6-7. New York, NY: National Center on Children in Poverty.
- xix Center on Hunger and Poverty & Food Research and Action Center. (Undated). *The paradox of hunger and obesity in America*.
- ^{xx} Center on Hunger and Poverty & Food Research and Action Center. (Undated.) *The paradox of hunger and obesity in America*, 2. Waltham, MA & Washington, DC: Authors.
- xxi Center on Hunger and Poverty & Food Research and Action Center. (Undated.) *The paradox of hunger and obesity in America*, 2. Waltham, MA & Washington, DC: Authors.
- xxii Sturm, R. (2002). The effects of obesity, smoking, and drinking on medical problems and costs. *Health Affairs* (Mar./Apr. 2002).
- xxiii Connecticut Department of Public Health. Connecticut's plan for health promotion (draft version, Mar. 2004).

ii Connecticut General Assembly, Office of Legislative Research. (2002, July). *Childhood obesity*. Report # 2002-R-0858. Hartford, CT: Author.

iii Spigel, S. (2002, June 19). *Childhood obesity*. OLR Research Report 2002-R-0529. Office of Legal Research. Hartford: Connecticut General Assembly.

iv Connecticut General Assembly, Office of Legislative Research. (2004, Dec. 14). *Connecticut health trends and issues*, 2. Report # 2004-R-0945. Hartford, CT: Author. This data is originally from United Health Foundation, American Public Health Association, and Partnership for Prevention. (2004). *America's health: state health rankings*.

^v Connecticut Department of Public Health. (2004, Dec.). Draft version of *Connecticut's plan for health promotion through healthy eating and active living*, 4. Hartford: Author.

vi Finkelstein, Eric A., et al. (2004, Jan.). State level estimates of annual medical expenditures attributable to obesity. *Obesity Research 12*(1).